

Amendments to the Claims:

The below-listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) An apparatus for intended use in charging particles in a system for separating particles from a fluid flow, comprising:

a chamber including an inlet for receiving the particles and an outlet for discharging the particles; and

a rotor rotatably mounted in the chamber, the rotor having a generally non-permeable outer surface for contacting and assisting in charging the particles.

2. (Original) The apparatus according to claim 1, wherein the rotor is circular, polygonal, or gear-shaped in cross-section.

3. (Currently amended) The apparatus according to claim 1, wherein the chamber is generally [[cylindrical]] annular.

4. (Original) The apparatus according to claim 1, wherein the outlet is positioned below and generally opposite the inlet.

5. (Original) The apparatus according to claim 1, further including a partition projecting into the chamber adjacent the rotor.

6. (Original) The apparatus according to claim 5, wherein the partition is adjustable to vary the distance between an end of the partition and the rotor.

7. (Original) The apparatus according to claim 1, further including a motor for rotating the rotor.

8. (Original) The apparatus according to claim 1, wherein the rotor rotates at a rotational speed of between about 1,200 and 10,000 revolutions per minute.

9. (Previously Presented) The apparatus according to claim 1, further including an electric field in the chamber.

10. (Currently Amended) The apparatus according to claim[[s]] 9, wherein the electric field is created by a variable voltage source having a first lead connected to the rotor and a second lead connected to a wall of the chamber.

11. (Original) A particle separation system including the apparatus of claim 1.

12 - 21. (Cancelled)

22. (New) An apparatus for intended use in charging particles in a system for separating particles from a fluid flow, comprising:

a wall forming a chamber including an inlet for receiving the particles and an outlet for discharging the particles; and

means for frictionally charging the particles in the chamber.

23. (New) The apparatus according to claim 22, wherein the means for frictionally charging the particles in the chamber comprises a rotor rotatably mounted in the chamber, the rotor having a generally non-permeable outer surface.

24. (New) The apparatus according to claim 22, further including a partition projecting into the chamber adjacent the means for frictionally charging the particles in the chamber.

25. (New) The apparatus according to claim 24, wherein the partition is adjustable to vary the distance between an end of the partition and the means for frictionally charging the particles in the chamber.

26. (New) The apparatus according to claim 22, wherein the means for frictionally charging the particles in the chamber rotates at a rotational speed of between about 1,200 and 10,000 revolutions per minute.

27. (New) The apparatus according to claim 22, further including an electric field in the chamber.

28. (New) The apparatus according to claims 27, wherein the electric field is created by a variable voltage source having a first lead connected to the means for frictionally charging the particles in the chamber and a second lead connected to a wall of the chamber.

29. (New) A particle separation system including the apparatus of claim 22.

30. (New) A system for intended use in separating particles from a fluid flow, comprising:

a wall defining a chamber including an inlet for receiving the particles and an outlet for discharging the particles;

a rotor rotatably mounted in the chamber, the rotor having a generally non-permeable outer surface for contacting and assisting in charging the particles; and

a separator downstream of the chamber outlet for separating the charged particles from the fluid flow.

31. (New) The apparatus of claim 1, further including an outer wall defining the chamber, and wherein an outer surface of the rotor matches the inner surface of the outer wall.

32. (New) The apparatus of claim 30, further including an outer wall defining the chamber, and wherein an outer surface of the rotor matches the inner surface of the outer wall.